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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/716,706	11/20/2000	Raghunath Vitthal Chaudhari	U 013054-6	6784

7590 05/03/2004

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EXAMINER

PRICE, ELVIS O

ART UNIT	PAPER NUMBER
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1621

DATE MAILED: 05/03/2004

19

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/716,706

Applicant(s)

CHAUDHARI ET AL.

Examiner

Elvis O. Price

Art Unit

1621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 12-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12 and 15-18 is/are allowed.
- 6) ☒ Claim(s) 13, 14 and 19-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 12-23 are pending in the application.
2. Applicants' amendments and arguments, filed 1/7/04, were found convincing to overcome the 35 USC 102(b) rejections issued in the office action dated 1/8/03.

However, the Examiner has issued the following new rejections.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13,14 and 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaudhari et al. {US Pat. 5, 650,546}, in view of Browning et al. {US Pat. 3,901,822}.

Applicants claim a hydrogenation catalyst of the general formula  $AB(y)C(z)$  wherein A is a support selected from magnesium acetate, magnesium nitrate, magnesium carbonate or magnesium chloride, B is Pt or Pd, y is 0.2 to 10%, C is nickel and z is 0 to 15% with the proviso that when B is Pt, z is 0.

Browning et al. teach noble metal hydrogenation catalyst that may be supported on, inter-alia, magnesium carbonate, and the like (Col. 2, lines 26-34). Browning et al. teach that the noble metals, which constitute the hydrogenation catalysts, are palladium, platinum, etc. The difference between the presently claimed invention and what is

Art Unit: 1621

taught by the Browning et al. reference is that the Browning et al. reference is silent with regard to the percentage of the noble metal contained in the hydrogenation catalyst.

However, it would have been *prima facie* obvious to one having ordinary skill in the art, in view of the teachings of the Browning et al. reference, to arrive at the presently claimed hydrogenation catalyst because Browning et al. teach noble metal hydrogenation catalysts wherein the metals are selected from palladium or platinum and the said metals are supported on metal carbonates (such as magnesium carbonate and the like).

One having ordinary skill in the art would have been motivated, in view of the Browning et al. reference, to arrive at noble metal hydrogenation catalysts consisting of palladium or platinum supported on Group IIA metal carbonates such as magnesium calcium, or barium carbonate since Browning et al. teach that the palladium or platinum metals can be supported on a magnesium carbonate or the like. The skill artisan would also have been motivated to vary the percentage of the metal to obtain all possible amounts of noble metal required to render an active hydrogenation catalyst. And depending on cost and availability of the noble metal, one of ordinary skill in the art would be motivated to utilize the lowest percentage of noble metal needed to prepare the said hydrogenation catalysts. Thus, it would not be unreasonable for one having ordinary skill in the art to expect that the hydrogenation catalysts taught by Browning et al. would contain the noble metal in a percentage of anywhere from 0.2 to 10% or that one desiring to minimize catalyst cost would venture to use the lowest amount of metal

Art Unit: 1621

required to maintain catalytic activity. The instantly claimed invention would therefore have been obvious to one having ordinary skill in the art.

***Allowable Subject Matter***

The following is a statement of reasons for the indication of allowable subject matter: The subject matter of claims 12 and 15-18 are unobvious over the prior art of record because the prior art of record does not teach or suggest a hydrogenation catalyst as defined by claim 12 and/or a hydrogenation catalyst comprised of palladium metal supported on ZSM5-NH<sub>4</sub>, wherein the catalyst contains palladium 0.2 to 10% palladium.

***Response to Arguments***

Applicants' arguments filed 1/7/04 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elvis O. Price whose telephone number is 571 272-0644. The examiner can normally be reached on 8:30 am to 5:00 pm; Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on 571 272-0646. The fax phone numbers for the organization where this application or proceeding is assigned is 703 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-1235.

Application/Control Number: 09/716,706  
Art Unit: 1621

Page 5

A handwritten signature in black ink, appearing to read "Elvis O. Price". The signature is stylized with a large, looped "E" and a cursive "Price".

Elvis O. Price

April 28, 2004